

WHAT IS CLAIMED IS:

Sub (A)

1. A heat exchanger core comprising:

a pair of header members being spaced with a predetermined clearance therebetween and disposed opposite to each other;

5 tubes and corrugated fins which are interposed between said pair of header members and are arranged alternately; and

a reinforcement member ⁽¹⁷⁾ being provided on ends of said mutually-opposing header members,

10 wherein each of said header members has tube holes into which ends of said tubes are fixedly inserted and reinforcement holes into which ends of said reinforcement members are fixedly inserted,

wherein each of said reinforcement holes is formed so as to be of the same size as or larger than each of said tube holes,

15 and

wherein an interval between said reinforcement hole and said tube hole adjacent to said reinforcement hole is made equal to an interval between adjacent tube holes.

20

2. A heat exchanger core according to claim 1, wherein wherein each of said tube holes is formed so as to be of the same size as each of said reinforcement holes.

25

3. A heat exchanger core according to claim 2, wherein said reinforcement hole comprises circular-arch sections being formed at both ends thereof and a linear section being formed between said circular-arch sections,

an insertion section is formed at the end of said

reinforcement member so as to have a rectangular cross section and be fixedly inserted into said reinforcement hole, and a width of said insertion section is made smaller than a width of said reinforcement hole as well as larger than a length of the linear section so that said insertion section is inserted into said reinforcement holes by press-fitting.

4. A heat exchanger core according to claim 1, wherein an interval between the linear section on a side of the adjacent tube hole of said reinforcement hole and an end face of said header member is made smaller than a value obtained by adding a size of a shorter side of said tube hole to the interval between the adjacent tube holes.

15 Sub C2 5. A heat exchanger core comprising:
a pair of header members being spaced with a predetermined clearance therebetween and disposed opposite to each other; and
tubes and corrugated fins which are interposed between said pair of header members and are arranged alternately,
20 a reinforcement member being provided on ends of said mutually-opposing header members,
wherein each of said header members has tube holes into which ends of said tubes are fixedly inserted and reinforcement holes into which ends of said reinforcement members are fixedly
25 inserted, said reinforcement member comprises a reinforcing section having a C-shaped cross section and insertion sections which are integrally formed with opposite ends of said reinforcing section, and a width of said reinforcement member

is smaller than a width of said corrugated fin.

6. A heat exchanger core according to claim 5, wherein a width of said insertion section of said reinforcement member is substantially equal to a width of said tube.

7. A heat exchanger core according to claim 5, wherein notches are formed on opposite sides of a base end section of said insertion section of said reinforcement member.

8. A heat exchanger core according to claim 5, wherein chamfered sections are formed on opposite sides of a tip end of said insertion section.

9. A method of assembling a heat exchanger core comprising steps of:

guiding fins along a horizontal guide surface formed in a base member;

guiding both ends of tubes and insertion sections of reinforcement members into tube guides which are provided on opposite sides of the base member while arranging alternately the fins and the tubes;

placing the reinforcement members at either end in the direction of arrangement of the fins and the tubes to thereby constitute a core section; and

attaching header members to opposite sides of the core section.

ADD A2
add B2